

EXHIBIT 7

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18 **UNITED STATES DISTRICT COURT**
19 **FOR THE NORTHERN DISTRICT OF CALIFORNIA**

20 GOOGLE LLC,

21 *Plaintiff,*

22 v.

23 SONOS, INC.,

24 *Defendant.*

Case No. 3:20-cv-6754

**SONOS, INC.'S DISCLOSURE OF
ASSERTED CLAIMS AND
INFRINGEMENT CONTENTIONS**

Honorable William Alsup

1 Still further, on information and belief, Google operates servers in the United States that
2 host at least the Google Home app for download onto smartphone, tablet, and computer devices,
3 and these servers infringe certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16).
4 Thus, Google has also directly infringed and continues to directly infringe certain asserted claims
5 of the '966 Patent at least by "mak[ing]" and/or "us[ing]" servers that host at least the Google
6 Home app in violation of 35 U.S.C. § 271(a).

7 '885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted
8 claim of the '885 Patent. Thus, Google has directly infringed and continues to directly infringe
9 each asserted claim of the '885 Patent at least by offering to sell, selling, and/or importing into the
10 United States Cast-enabled media players.

11 Further, on information and belief, Google has directly infringed and continues to directly
12 infringe claims 1-3, 5-10, 12-14 of the '885 Patent by virtue of installing software (e.g., firmware
13 updates) onto Cast-enabled media players, which constitutes "mak[ing]" an infringing device
14 under 35 U.S.C. § 271(a).

15 Further yet, on information and belief, Google has directly infringed and continues to
16 directly infringe each asserted claim of the '885 Patent by virtue of using Cast-enabled media
17 players, which constitutes "us[ing]" an infringing device under 35 U.S.C. § 271(a).

18 **ii. Induced Infringement Under 35 U.S.C. § 271(b)**

19 Pursuant to 35 U.S.C. § 271(b), Google also actively, knowingly, and intentionally
20 induced (and continues to actively, knowingly, and intentionally induce) others to make, use,
21 offer to sell, sell, and/or import the Accused Instrumentalities into the United States. As noted in
22 Sonos's Amended Complaint, Google had actual knowledge of the Asserted Patents prior to the
23 filing of the Complaint. *See also* Google LLC's Objections and Responses to Sonos's Inc.'s First
24 Set of Interrogatories (Nos. 1-20) (dated September 7, 2021) at Google's response to Sonos's
25 Interrogatory No. 1; Sonos, Inc.'s Objections and Responses to Google LLC's First Set of
26 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Sonos's response to Google's
27 Interrogatory No. 14, both of which are herein incorporated by reference.
28

1 '615 and '033 Patents: Sonos contends that each Cast-enabled computing device, as well
2 as each Cast-enabled display, infringes every asserted claim of the '615 and '033 Patents. Despite
3 knowing of the '615 and '033 Patents, Google has actively, knowingly, and intentionally induced
4 (and continues to actively, knowingly, and intentionally induce) others to directly infringe the
5 asserted claims in various ways, in violation of 35 U.S.C. § 271(b).

6 For example, through Google's website, advertising and promotional material, user
7 guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally
8 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and
9 induce) others to install one or more of the accused Cast-enabled apps (including Google's own
10 Cast-enabled apps and third-party Cast-enabled apps, such as Spotify) onto computing devices,
11 and thereby "make[]" an infringing device, which constitutes direct infringement of claims 13-15,
12 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C.
13 § 271(a).

14 As another example, through Google's website, advertising and promotional material, user
15 guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally encouraged and
16 induced (and continues to actively, knowingly, and intentionally encourage and induce) others to
17 install Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the Cast-
18 enabled displays, and thereby "make[]" an infringing device, which constitutes direct
19 infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of
20 the '033 Patent under 35 U.S.C. § 271(a).

21 As yet another example, through Google's website, advertising and promotional material,
22 user guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally
23 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and
24 induce) others to "use" Cast-enabled computing devices installed with one or more of the accused
25 Cast-enabled apps (including Google's own Cast-enabled apps and third-party Cast-enabled apps,
26 such as Spotify) and "use" Cast-enabled displays, which constitutes direct infringement of the
27 asserted claims of the '615 and '033 Patents under 35 U.S.C. § 271(a).

1 As a further example, Google has actively, knowingly, and intentionally encouraged and
2 induced (and continues to actively, knowingly, and intentionally encourage and induce)
3 distributors and retailers to “offer[] to sell” and “sell[]” Cast-enabled computing devices installed
4 with one or more of the accused Cast-enabled apps, as well as Cast-enabled displays, which
5 constitutes direct infringement of the asserted claims of the ’615 and ’033 Patents under 35
6 U.S.C. § 271(a).

7 As still another example, by making, importing, offering to sell, and selling Cast-enabled
8 media players programmed with software that facilitates the accused Cast functionality in the
9 accused Cast-enabled apps and Cast-enabled software for transferring playback of streaming
10 media content from a Cast-enabled computing device or Cast-enabled display to a Cast-enabled
11 media player and then controlling the Cast-enabled media player’s playback via the Cast-enabled
12 computing device or Cast-enabled display, Google has actively, knowingly, and intentionally
13 induced (and continues to actively, knowingly, and intentionally induce) others to “mak[e]” and
14 “use” Cast-enabled computing devices and Cast-enabled displays, which constitutes direct
15 infringement of the asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

16 As still a further example, for certain of the accused Cast-enabled apps (including
17 Google’s own Cast-enabled apps and third-party apps, such as Spotify), the backend software that
18 facilitates the accused Cast functionality for transferring playback of streaming media content
19 from a Cast-enabled computing device or Cast-enabled display to a Cast-enabled media player
20 and then controlling the Cast-enabled media player’s playback via the Cast-enabled computing
21 device or Cast-enabled display is hosted by Google on Cloud-based infrastructure that is owned
22 and/or operated by Google (sometimes referred to as Google Cloud Platform or “GCP” for short),
23 and by virtue of hosting this backend software, Google has actively, knowingly, and intentionally
24 induced (and continues to actively, knowingly, and intentionally induce) others to “mak[e]” and
25 “use” Cast-enabled computing devices and Cast-enabled displays, which constitutes direct
26 infringement of the asserted claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a).

27 As another example, through its relationship and collaboration with third parties, such as
28 Spotify, that develop and release third-party Cast-enabled apps having the accused Cast

1 functionality for transferring playback of streaming media content from a Cast-enabled
2 computing device or Cast-enabled display to a Cast-enabled media player and then controlling the
3 Cast-enabled media player's playback via the Cast-enabled computing device or Cast-enabled
4 display, Google has actively, knowingly, and intentionally induced (and continues to actively,
5 knowingly, and intentionally induce) such third parties to "make[]" and "use[]" Cast-enabled
6 computing devices and Cast-enabled displays, which constitutes direct infringement of the
7 asserted claims of the '615 and '033 Patents under 35 U.S.C. § 271(a).

8 Along with its actual knowledge of the '615 and '033 Patents, Google also knew (or
9 should have known) that its actions would induce others to directly infringe the asserted claims of
10 the '615 and '033 Patents. For example, Google has supplied and continues to supply from the
11 United States its own Cast-enabled apps to users in the United States and abroad and encourages
12 installation and use of such Cast-enabled apps in the United States and abroad while knowing that
13 the installation and use of Google's Cast-enabled apps will infringe the asserted claims of the
14 '615 and '033 Patents. As another example, Google has supplied and continues to supply from the
15 United States its Cast technology for incorporation into third-party Cast-enabled apps (such as
16 Spotify) and encourages installation and use of such third-party Cast-enabled apps while knowing
17 that the installation and use of these third-party Cast-enabled apps will infringe the asserted
18 claims of the '615 and '033 Patents. As yet another example, Google has supplied and continues
19 to supply Cast-enabled displays (and software for the Cast-enabled displays) to users and
20 encourages installation and use of Cast-enabled software on the Cast-enabled displays while
21 knowing that such installation and use will infringe the asserted claims of the '615 and '033
22 Patents. As still another example, for certain of the accused Cast-enabled apps (including
23 Google's own Cast-enabled apps and third-party apps, such as Spotify), Google has hosted and
24 continues to host backend software that facilitates the accused Cast functionality on Cloud-based
25 infrastructure that is owned and/or operated by Google while knowing that installation and use of
26 such Cast-enabled apps will infringe the asserted claims of the '615 and '033 Patents.

27 '966 Patent: Sonos contends that each computing device installed with at least the Google
28 Home app infringes every asserted claim of the '966 Patent. Despite knowing of the '966 Patent,

1 Google has actively, knowingly, and intentionally induced (and continues to actively, knowingly,
2 and intentionally induce) others to directly infringe the asserted claims by actively encouraging
3 others to make, use, offer to sell, sell, and/or import the aforementioned devices into the United
4 States in violation of 35 U.S.C. § 271(b).

5 For example, through Google’s website, advertising and promotional material, user
6 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or
7 displayed on the Cast-enabled media players, Cast-enabled computing devices, and/or Cast-
8 enabled displays, Google has actively, knowingly, and intentionally encouraged and induced (and
9 continues to actively, knowingly, and intentionally encourage and induce) others to install the
10 Google Home app onto computing devices, and thereby “make[]” an infringing device, which
11 constitutes direct infringement of claims 1-4, 6-12, 14-16 of the ’966 Patent under 35 U.S.C. §
12 271(a).

13 As another example, through Google’s website, advertising and promotional material, user
14 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or
15 displayed on the Cast-enabled media players, Cast-enabled computing devices, and/or Cast-
16 enabled displays, Google has actively, knowingly, and intentionally encouraged and induced (and
17 continues to actively, knowingly, and intentionally encourage and induce) others to “use”
18 computing devices installed with the Google Home app, which constitutes direct infringement of
19 the asserted claims of the ’966 Patent under 35 U.S.C. § 271(a).

20 As yet another example, Google has actively, knowingly, and intentionally encouraged
21 and (and continues to actively, knowingly, and intentionally encourage and induce) distributors
22 and retailers to “offer[] to sell” and “sell[]” computing devices installed with at least the Google
23 Home app, which constitutes direct infringement of the asserted claims of the ’966 Patent under
24 35 U.S.C. § 271(a).

25 As still another example, by making, importing, offering to sell, and selling Cast-enabled
26 media players that require users to install the Google Home app in order to set up and configure
27 the Cast-enabled media players and Cast-enabled displays, Google has actively, knowingly, and
28 intentionally induced (and continues to actively, knowingly, and intentionally induce) others to

1 “mak[e]” and “use” computing devices installed with the Google Home app, which constitutes
2 direct infringement of the asserted claims of the ’966 Patent under 35 U.S.C. § 271(a).

3 Along with its actual knowledge of the ’966 Patent, Google also knew (or should have
4 known) that its actions would induce others to directly infringe the asserted claims of the ’966
5 Patent. For example, Google has supplied and continues to supply from the United States the
6 Google Home app to users in the United States and abroad while knowing that the download and
7 installation of this app will infringe the asserted claims of the ’966 Patent.

8 ’885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted
9 claim of the ’885 Patent. Despite knowing of the ’885 Patent, Google has actively, knowingly,
10 and intentionally induced (and continues to actively, knowingly, and intentionally induce) others
11 to directly infringe the asserted claims by actively encouraging others to make, use, offer to sell,
12 sell, and/or import Cast-enabled media players into the United States in violation of 35 U.S.C. §
13 271(b).

14 For example, through Google’s website, advertising and promotional material, user
15 guides, the Google Home app (among other apps offered by Google), and/or the Google Play
16 Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues
17 to actively, knowingly, and intentionally encourage and induce) others to install firmware updates
18 onto Cast-enabled media players, and thereby “make[]” an infringing device, which constitutes
19 direct infringement of claims 1-3, 5-10, 12-14 of the ’885 Patent under 35 U.S.C. § 271(a).

20 As another example, through Google’s website, advertising and promotional material, user
21 guides, the Google Home app (among other apps offered by Google), and/or the Google Play
22 Store, Google has actively, knowingly, and intentionally encouraged and induced (and continues
23 to actively, knowingly, and intentionally encourage and induce) others to “use” Cast-enabled
24 media players, which constitutes direct infringement of the asserted claims of the ’885 Patent
25 under 35 U.S.C. § 271(a).

26 As yet another example, Google has actively, knowingly, and intentionally induced (and
27 continues to actively, knowingly, and intentionally induce) distributors and retailers to “offer[] to
28

1 sell” and “sell[]” Cast-enabled media players, which constitutes direct infringement of the
 2 asserted claims of the ’885 Patent under 35 U.S.C. § 271(a).

3 Along with its actual knowledge of the ’885 Patent, Google also knew (or should have
 4 known) that its actions would induce others to directly infringe the asserted claims of the ’885
 5 Patent. For instance, Google has supplied and continues to supply Cast-enabled media players (as
 6 well as firmware updates) to users while knowing that the use of Cast-enabled media players will
 7 infringe the asserted claims of the ’885 Patent.

8 **iii. Contributory Infringement Under 35 U.S.C. § 271(c)**

9 Pursuant to 35 U.S.C. § 271(c), Google has also contributorily infringed (and continues to
 10 contributorily infringe) the asserted claims of the Asserted Patents by supplying software
 11 components in the United States to be installed and/or used by users of the Accused
 12 Instrumentalities – each of which is a material component of the Accused Instrumentalities that
 13 has no substantial noninfringing use – with knowledge that the software components were
 14 especially made or adapted for use in an Accused Instrumentality such that the installation and/or
 15 use of the software components would result in direct infringement. As noted in Sonos’s
 16 Amended Complaint, Google had actual knowledge of the Asserted Patents prior to the filing of
 17 the Complaint. *See also* Google LLC’s Objections and Responses to Sonos’s Inc.’s First Set of
 18 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Google’s response to Sonos’s
 19 Interrogatory No. 1; Sonos, Inc.’s Objections and Responses to Google LLC’s First Set of
 20 Interrogatories (Nos. 1-20) (dated September 7, 2021) at Sonos’s response to Google’s
 21 Interrogatory No. 14, both of which are herein incorporated by reference.

22 ’615 and ’033 Patents: Google has contributorily infringed (and continues to
 23 contributorily infringe) the asserted claims of the ’615 and ’033 Patents by virtue of the fact that
 24 (i) in addition to importing and selling certain Cast-enabled computing devices that come pre-
 25 installed with one or more of the accused Cast-enabled apps, Google supplies software
 26 components for performing the accused Cast functionality as part of Google’s own Cast-enabled
 27 apps for installation onto Cast-enabled computing devices in the United States and also as part of
 28 Google’s own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation

1 onto Cast-enabled displays in the United States, and each time a user installs these software
2 components, the user “makes” an infringing device and thereby directly infringes the asserted
3 claims of the ’615 and ’033 Patents under 35 U.S.C. § 271(a), and (ii) on information and belief,
4 Google additionally supplies software components for performing the accused Cast functionality
5 to third parties (such as Spotify) that incorporate such software code into third-party Cast-enabled
6 apps for installation onto Cast-enabled computing devices and/or Cast-enabled displays in the
7 United States, and each time a user installs these software components, the user “makes” an
8 infringing device.

9 The software components for performing the accused Cast functionality are material
10 components of infringing devices that are not staple articles or commodities of commerce suitable
11 for substantial noninfringing use because the only possible use for these software components is
12 to be installed and run on infringing Cast-enabled computing devices and Cast-enabled displays.

13 Along with its actual knowledge of the ’615 and ’033 Patents, Google knew (or should
14 have known) that the software components for performing the accused Cast functionality were
15 especially made or adapted for installation on infringing devices, and that installation of these
16 software components by others resulted in (and continues to result in) direct infringement of the
17 ’615 and ’033 Patents under 35 U.S.C. § 271(a) because each such installation “makes” a device
18 that meets every element of claims 13-15, 18-21, 23-26, 28-29 of the ’615 Patent and claims 1-2,
19 4, 7-13 of the ’033 Patent .

20 Moreover, as a result of Google’s contributory conduct, others have directly infringed the
21 asserted claims of the ’615 and ’033 Patents. For example, users have installed the supplied
22 software components for performing the accused Cast functionality (which are included in
23 Google’s own Cast-enabled apps, as well as third-party apps, such as Spotify) onto Cast-enabled
24 computing devices in the United States, thereby “making” infringing devices. As another
25 example, users have installed the supplied software components for performing the accused Cast
26 functionality (which are included in firmware, as well as Cast-enabled apps) onto Cast-enabled
27 displays in the United States, thereby “making” updated Cast-enabled displays that are infringing
28 devices. As yet another example, after installing the supplied software components for

1 performing the accused Cast functionality onto Cast-enabled computing devices and Cast-enabled
2 displays, users have used these infringing devices, which also constitutes direct infringement.

3 '966 Patent: Google has contributorily infringed (and continues to contributorily infringe)
4 the asserted claims of the '966 Patent by virtue of the fact that it supplies software components
5 for performing the accused functionality as part of the Google Home app in the United States, and
6 each time a user installs the Google Home app onto a computing device, the user "makes" an
7 infringing device and thereby directly infringes the asserted claims of the '966 Patent under 35
8 U.S.C. § 271(a). The software components included in the Google Home app are material
9 components of infringing devices that are not staple articles or commodities of commerce suitable
10 for substantial noninfringing use because the only possible use for these software components is
11 to be installed and run on infringing computing devices.

12 Along with its actual knowledge of the '966 Patent, Google knew (or should have known)
13 that the software components included in the Google Home app were especially made or adapted
14 for installation on infringing devices, and that installation of these software components by others
15 resulted in (and continues to result in) direct infringement of the '966 Patent under 35 U.S.C. §
16 271(a) because each such installation "makes" a device that meets every element of claims 1-4, 6-
17 12, 14-16 of the '966 Patent .

18 Moreover, as a result of Google's contributory conduct, others have directly infringed the
19 asserted claims of the '966 Patent. For example, users have installed the supplied software
20 components included as part of the Google Home app onto computing devices in the United
21 States, thereby "making" infringing computing devices. As another example, after installing the
22 software components included as part of the Google Home app onto computing devices, users
23 have used these infringing devices, which also constitutes direct infringement of the asserted
24 claims.

25 '885 Patent: Google has contributorily infringed (and continues to contributorily infringe)
26 the asserted claims of the '885 Patent by virtue of the fact that, in addition to importing and
27 selling Cast-enabled media players that come pre-installed with firmware, Google supplies
28 software components for performing the accused functionality as part of firmware updates for

1 Cast-enabled media players in the United States, and each time a user installs such a firmware
2 update, the user “makes” an infringing device and thereby directly infringes claims 1-3, 5-10, 12-
3 14 of the ’885 Patent under 35 U.S.C. § 271(a). The software components included in the
4 firmware updates are material components of Cast-enabled media players that are not staple
5 articles or commodities of commerce suitable for substantial noninfringing use because the only
6 possible use for these software components is to be installed and run on Cast-enabled media
7 players.

8 Along with its actual knowledge of the ’885 Patent, Google knew (or should have known)
9 that the software components included in the firmware updates were especially made or adapted
10 for installation on Cast-enabled media players, and that installation of these software components
11 by others resulted in (and continues to result in) direct infringement of the ’885 Patent under 35
12 U.S.C. § 271(a) because each such installation “makes” an updated player that meets every
13 element claims 1-3, 5-10, 12-14 of the ’885 Patent.

14 Moreover, as a result of Google’s contributory conduct, others have directly infringed the
15 asserted claims of the ’885 Patent. For example, users have installed the supplied software
16 components included as part of the firmware updates onto Cast-enabled media players in the
17 United States, thereby “making” updated Cast-enabled media players, which constitutes direct
18 infringement. As another example, after installing the software components included as part of
19 the firmware updates onto Cast-enabled media players, users have used Cast-enabled media
20 players, which also constitutes direct infringement of the asserted claims.

21 **iv. Infringement Under 35 U.S.C. § 271(f)(1)**

22 Pursuant to 35 U.S.C. § 271(f)(1), Google has also infringed by supplying in or from the
23 United States software and/or firmware components, which constitute substantial portions of the
24 components of Sonos’s patented inventions, and actively, knowingly, and intentionally induced
25 (and continues to actively, knowingly, and intentionally induce) others outside of the United
26 States to combine these software and/or firmware components in a manner that, if such
27 combination would have occurred in the United States (as it does pursuant to the theories set forth
28 in § I.B.iii), infringes the asserted claims of the Asserted Patents. And these combinations by

1 those outside of the United States do in fact occur. Accordingly, by supplying such software
2 and/or firmware components from the United States, Google is liable for infringement under 35
3 U.S.C. § 271(f)(1).

4 '615 and '033 Patents: Sonos contends that each Cast-enabled computing device, as well
5 as each Cast-enabled display, infringes every asserted claim of the '615 and '033 Patents. Despite
6 knowing of the '615 and '033 Patents, Google supplies software components for performing the
7 accused Cast functionality as part of Google's own Cast-enabled apps for installation onto Cast-
8 enabled computing devices and also as part of Google's own Cast-enabled software (e.g.,
9 firmware and/or Cast-enabled apps) for installation onto Cast-enabled displays. These software
10 and/or firmware components are at least substantial portions of the components of the patented
11 inventions of the '615 and '033 Patents. Google supplies these software and/or firmware
12 components from the United States to various entities outside the United States. Google then
13 induces those entities to combine the supplied components in a manner that would, if combined
14 within the United States, constitute infringement. Google has actively, knowingly, and
15 intentionally induced (and continues to actively, knowingly, and intentionally induce) these
16 entities to make such combinations outside the United States in various ways, in violation of 35
17 U.S.C. § 271(f)(1).

18 For example, through Google's website, advertising and promotional material, user
19 guides, and/or the Google Play Store, Google has actively, knowingly, and intentionally
20 encouraged and induced (and continues to actively, knowingly, and intentionally encourage and
21 induce) others outside the United States to install one or more of the accused Cast-enabled apps
22 (including Google's own Cast-enabled apps and third-party Cast-enabled apps, such as Spotify)
23 onto computing devices outside of the United States. If this combination were done within the
24 United States, that act would constitute "mak[ing]" an infringing device, which constitutes direct
25 infringement of claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of
26 the '033 Patent under 35 U.S.C. § 271(a).

27 As another example, through Google's website, advertising and promotional material, user
28 guides, and Cast-enabled apps, Google has actively, knowingly, and intentionally encouraged and

1 induced (and continues to actively, knowingly, and intentionally encourage and induce) others
2 outside the United States to install Cast-enabled software (e.g., firmware updates and/or Cast-
3 enabled apps) onto the Cast-enabled displays outside of the United States. If this combination
4 were done within the United States, that act would constitute “mak[ing]” an infringing device,
5 which constitutes direct infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent and
6 claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C. § 271(a).

7 As another example, through Google’s relationship with third-party manufacturers, third-
8 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor
9 role, Google actively, knowingly, and intentionally encourages and induces or instructs such
10 parties to install one or more of the accused Cast-enabled apps (including Google’s own Cast-
11 enabled apps and third-party Cast-enabled apps, such as Spotify) onto computing devices outside
12 of the United States. If this combination were done within the United States, that act would
13 constitute “mak[ing]” an infringing device, which constitutes direct infringement of claims 13-15,
14 18-21, 23-26, 28-29 of the ‘615 Patent and claims 1-2, 4, 7-13 of the ‘033 Patent under 35 U.S.C.
15 § 271(a).

16 As another example, through Google’s relationship with third-party manufacturers, third-
17 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor
18 role, Google actively, knowingly, and intentionally encourages and induces or instructs such
19 parties to install Cast-enabled software (e.g., firmware updates and/or Cast-enabled apps) onto the
20 Cast-enabled displays outside of the United States. If this combination were done within the
21 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct
22 infringement of claims 13-15, 18-21, 23-26, 28-29 of the ‘615 Patent and claims 1-2, 4, 7-13 of
23 the ‘033 Patent under 35 U.S.C. § 271(a).

24 As still another example, through Google’s relationship with entities (including affiliated
25 entities) that operate servers outside of the United States that host Cast-enabled apps for
26 download onto Cast-enabled computing devices and/or Cast-enabled software (e.g., firmware
27 and/or Cast-enabled apps) for download onto Cast-enabled displays, Google actively, knowingly,
28 and intentionally encourages and induces or instructs these entities to load, store, or otherwise

1 provide the Cast-enabled apps and/or Cast-enabled software onto these servers. If this
2 combination were done within the United States, that act would constitute direct infringement of
3 certain asserted claims of the '615 and '033 Patents (e.g., claims 13-15, 18-21, and 23-24 of the
4 '615 Patent and claims 12-13 of the '033 Patent) by “mak[ing]” and/or “us[ing]” servers that host
5 such software in violation of 35 U.S.C. § 271(a).

6 As still another example, through its relationship and collaboration with third parties
7 outside the United States, such as Spotify, that develop and release third-party Cast-enabled apps
8 having the accused Cast functionality for transferring playback of streaming media content from a
9 Cast-enabled computing device or Cast-enabled display to a Cast-enabled media player and then
10 controlling the Cast-enabled media player’s playback via the Cast-enabled computing device or
11 Cast-enabled display, Google has provided software components to these third parties and then
12 actively, knowingly, and intentionally induced (and continues to actively, knowingly, and
13 intentionally induce) such third parties to incorporate these software components into apps and
14 products in a manner that if done within the United States, would constitute direct infringement of
15 certain asserted claims of the '615 and '033 Patents (e.g., claims 13-15, 18-21, 23-26, 28-29 of
16 the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent) by “mak[ing]” or “us[ing]” an
17 infringing device under 35 U.S.C. § 271(a).

18 '966 Patent: Sonos contends that each computing device installed with at least the Google
19 Home app infringes every asserted claim of the '966 Patent. Despite knowing of the '966 Patent,
20 Google supplies the Google Home app from the United States to various entities outside the
21 United States. Google then induces those entities to combine the Google Home app in a manner
22 that would, if combined within the United States, constitute infringement. Google has actively,
23 knowingly, and intentionally induced (and continues to actively, knowingly, and intentionally
24 induce) these entities to make such combinations outside the United States in various ways, in
25 violation of 35 U.S.C. § 271(b).

26 For example, through Google’s website, advertising and promotional material, user
27 guides, and/or the Google Play Store, and via audible or visual instructions emitted from or
28 displayed on the Cast-enabled media players and Cast-enabled displays, Google has actively,

1 knowingly, and intentionally encouraged and induced (and continues to actively, knowingly, and
2 intentionally encourage and induce) others outside the United States to install the Google Home
3 app onto computing devices outside the United States. If this combination were done within the
4 United States, that act would constitute “mak[ing]” an infringing device, which constitutes direct
5 infringement of claims 1-4, 6-12, 14-16 of the ’966 Patent under 35 U.S.C. § 271(a).

6 As another example, through Google’s relationship with entities (including affiliated
7 entities) that operate servers outside of the United States that host the Google Home app for
8 download onto smartphone, tablet, and computer devices, Google actively, knowingly, and
9 intentionally encourages and induces or instructs these entities to load, store, or otherwise provide
10 the Google Home app onto these servers. If this combination were done within the United States,
11 that act would constitute direct infringement of certain asserted claims of the ’966 Patent (e.g.,
12 claims 9-12 and 14-16) by “mak[ing]” and/or “us[ing]” servers that host such software in
13 violation of 35 U.S.C. § 271(a).

14 ’885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted
15 claim of the ’885 Patent. Despite knowing of the ’885 Patent, Google supplies from the United
16 States software components for performing the accused functionality as part of firmware updates
17 for Cast-enabled media players. Google then through Google’s website, advertising and
18 promotional material, user guides, the Google Home app (among other apps offered by Google),
19 and/or the Google Play Store, Google has actively, knowingly, and intentionally encouraged and
20 induced (and continues to actively, knowingly, and intentionally encourage and induce) others
21 outside the United States to install firmware updates onto Cast-enabled media players outside the
22 United States. If this combination were done within the United States, that act would constitute
23 “mak[ing]” or “us[ing]” an infringing device, which constitutes direct infringement of the
24 asserted claims of the ’885 Patent under 35 U.S.C. § 271(a).

25 As another example, through Google’s relationship with third-party manufacturers, third-
26 party distributors, or via an otherwise affiliated entity that acts in a manufacturer or distributor
27 role, Google actively, knowingly, and intentionally encourages and induces or instructs such
28 parties to, outside of the United States, install or load firmware onto Cast-enabled media players.

1 If this combination were done within the United States, that act would constitute “mak[ing]” an
 2 infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the ’885
 3 Patent under 35 U.S.C. § 271(a).

4 **v. Infringement Under 35 U.S.C. § 271(f)(2)**

5 Pursuant to 35 U.S.C. § 271(f)(2), Google has also infringed by supplying software
 6 components in or from the United States to be combined, installed, loaded, and/or used by others
 7 outside of the United States, where these software components are components of the patented
 8 inventions that have no substantial noninfringing use and are not staple articles or commodities of
 9 commerce – with knowledge that these software components were especially made or adapted for
 10 use and an intent that these software components would be combined, installed, loaded, and/or
 11 used outside the United States such that, if such combination, installation, load, and/or use
 12 occurred within the United States (as it does pursuant to the theories set forth in § I.B.iii), it
 13 would infringe the asserted claims of the Asserted Patents. And these combinations by those
 14 outside of the United States do in fact occur. Accordingly, by supplying such software
 15 components in or from the United States, Google is liable for infringement under 35 U.S.C. §
 16 271(f)(2).

17 ’615 and ’033 Patents: Sonos contends that each Cast-enabled computing device, as well
 18 as each Cast-enabled display, infringes every asserted claim of the ’615 and ’033 Patents.
 19 Despite knowing of the ’615 and ’033 Patents, Google supplies software components for
 20 performing the accused Cast functionality as part of Google’s own Cast-enabled apps for
 21 installation onto Cast-enabled computing devices outside the United States and also as part of
 22 Google’s own Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for installation
 23 onto Cast-enabled displays outside the United States. Google intends that others outside the
 24 United States, including users, install these software components onto computing devices and
 25 Cast-enabled displays and knows that such installation does in fact occur and that such
 26 installation, if occurring in the United States, would constitute “mak[ing]” an infringing device
 27 thereby directly infringing claims 13-15, 18-21, 23-26, 28-29 of the ’615 Patent and claims 1-2, 4,
 28 7-13 of the ’033 Patent under 35 U.S.C. § 271(a).

1 Despite knowing of the '615 and '033 Patents, Google additionally supplies software
2 components for performing the accused Cast functionality to third parties (such as Spotify) that
3 incorporate such software code into third-party Cast-enabled apps for installation onto Cast-
4 enabled computing devices and/or Cast-enabled displays outside of the United States. Google
5 intends that these third parties (such as Spotify) incorporate such software code into third-party
6 Cast-enabled apps for installation onto Cast-enabled computing devices and/or Cast-enabled
7 displays outside of the United States and knows that such incorporation does in fact occur and
8 that such incorporation, if occurring in the United States, would constitute "mak[ing]" an
9 infringing device thereby directly infringing claims 13-15, 18-21, 23-26, 28-29 of the '615 Patent
10 and claims 1-2, 4, 7-13 of the '033 Patent under 35 U.S.C. § 271(a).

11 As another example, Google supplies software components for performing the accused
12 Cast functionality to third-party manufacturers, third-party distributors, or to an otherwise
13 affiliated entity that acts in a manufacturer or distributor role, who then, outside of the United
14 States installs these software components onto computing devices outside of the United States.
15 Google intends that these parties install these software components onto computing devices
16 outside of the United States. If this combination were done within the United States, that act
17 would constitute "mak[ing]" an infringing device, which constitutes direct infringement of claims
18 13-15, 18-21, 23-26, 28-29 of the '615 Patent and claims 1-2, 4, 7-13 of the '033 Patent under 35
19 U.S.C. § 271(a).

20 As another example, Google supplies software components for performing the accused
21 Cast functionality to entities (including affiliated entities) that operate servers outside of the
22 United States that host Cast-enabled apps for download onto Cast-enabled computing devices
23 and/or Cast-enabled software (e.g., firmware and/or Cast-enabled apps) for download onto Cast-
24 enabled displays. Google intends that these entities load, store, or otherwise provide the Cast-
25 enabled apps and/or Cast-enabled software onto these servers. If this combination were done
26 within the United States, that act would constitute direct infringement of certain asserted claims
27 of the '615 and '033 Patents (e.g., claims 13-15, 18-21, and 23-24 of the '615 Patent and claims
28

1 12-13 of the '033 Patent) by “mak[ing]” and/or “us[ing]” servers that host such software in
2 violation of 35 U.S.C. § 271(a).

3 Google knows the foregoing software components for performing the accused Cast
4 functionality are material components of infringing devices and the patented inventions that are
5 not staple articles or commodities of commerce suitable for substantial noninfringing use because
6 the only possible use for these software components is to be loaded, installed, and/or run on
7 infringing Cast-enabled computing devices and Cast-enabled displays.

8 '966 Patent: Sonos contends that each computing device installed with at least the Google
9 Home app infringes every asserted claim of the '966 Patent. Despite knowing of the '966 Patent,
10 Google supplies software components for performing the accused functionality as part of the
11 Google Home app in or from the United States to various entities outside the United States.
12 Google knows and intends for those entities to combine the software components in a manner that
13 would, if combined within the United States, constitute infringement because each combination
14 or installation of the Google Home app onto a computing device would constitute “mak[ing]” an
15 infringing device and thus directly infringe claims 1-4, 6-12, 14-16 of the '966 Patent under 35
16 U.S.C. § 271(a).

17 Google knows that the software components included in the Google Home app are
18 material components of infringing devices that are not staple articles or commodities of
19 commerce suitable for substantial noninfringing use because the only possible use for these
20 software components is to be installed and run on infringing computing devices.

21 Along with its actual knowledge of the '966 Patent, Google knew (or should have known)
22 that the software components included in the Google Home app were especially made or adapted
23 for installation on infringing devices, and that installation of these software components by others
24 outside of the United States would, if done within the United States, constitute (and continues to
25 result in) direct infringement of the '966 Patent under 35 U.S.C. § 271(a) because each such
26 installation “makes” a device that meets every element of every asserted claims.

27 Moreover, as a result of Google providing software components of the Google Home app,
28 others have outside of the United States combined the Google Home app in a manner that, if done

1 within the United States, would constitute direct infringement of the asserted claims of the '966
2 Patent. For example, others outside the United States have installed the Google Home app onto
3 computing devices outside the United States. If this combination were done within the United
4 States, that act would constitute "mak[ing]" an infringing device, which constitutes direct
5 infringement of claims 1-4, 6-12, 14-16 of the '966 Patent under 35 U.S.C. § 271(a).

6 As another example, Google supplies software components of the Google Home app to
7 entities (including affiliated entities) that operate servers outside of the United States that host the
8 Google Home app for download onto smartphone, tablet, and computer devices. Google intends
9 that these entities load, store, or otherwise provide the Google Home app onto these servers. If
10 this combination were done within the United States, that act would constitute direct infringement
11 of certain asserted claims of the '966 Patent (e.g., claims 9-12 and 14-16) by "mak[ing]" and/or
12 "us[ing]" servers that host such software in violation of 35 U.S.C. § 271(a).

13 '885 Patent: Sonos contends that each Cast-enabled media player infringes every asserted
14 claim of the '885 Patent. Despite knowing of the '885 Patent, Google supplies in or from the
15 United States software components for performing the accused functionality as part of firmware
16 updates for Cast-enabled media players, and users install such a firmware update outside of the
17 United States in a manner that, if done within the United States, would constitute "mak[ing]" an
18 infringing device and thereby directly infringe claims 1-3, 5-10, 12-14 of the '885 Patent under 35
19 U.S.C. § 271(a). The software components included in the firmware updates are material
20 components of the patented invention that are not staple articles or commodities of commerce
21 suitable for substantial noninfringing use because the only possible use for these software
22 components is to be installed and run on Cast-enabled media players, which constitute infringing
23 devices.

24 Along with its actual knowledge of the '885 Patent, Google knew (or should have known)
25 that the software components included in the firmware updates were especially made or adapted
26 for installation on Cast-enabled media players, and that installation of these software components
27 by others outside the United States would, if done within the United States, have resulted in (and
28 continues to result in) direct infringement of the '885 Patent under 35 U.S.C. § 271(a) because

1 each such installation “makes” an updated player that meets every element of every asserted
2 claims.

3 Moreover, as a result of Google providing such firmware updates others have outside of
4 the United States combined the firmware updates in a manner that, if done within the United
5 States, would constitute direct infringement of claims 1-3, 5-10, 12-14 of the ’885 Patent . For
6 example, users have, outside of the United States, installed the supplied software components
7 included as part of the firmware updates onto Cast-enabled media players outside the United
8 States, which if done within the United States would constitute “making” updated Cast-enabled
9 media players, which constitutes direct infringement.

10 As another example, Google provides firmware to manufacturers, third-party distributors,
11 or an otherwise affiliated entity that acts in a manufacturer or distributor role, who then, outside
12 of the United States installs or loads such firmware onto Cast-enabled media players. If this
13 combination were done within the United States, that act would constitute “mak[ing]” an
14 infringing device, which constitutes direct infringement of claims 1-3, 5-10, 12-14 of the ’885
15 Patent under 35 U.S.C. § 271(a).

16 **C. Infringement Claim Charts Pursuant to Patent L.R. 3-1(c)**

17 Based on the information currently in its possession, Sonos provides the following
18 exhibits attached hereto, which specify where each limitation of each asserted claim is found
19 within each Accused Instrumentality (whether literally or under the Doctrine of Equivalents):

20 Exhibit A: Infringement of ’615 Patent

21 Exhibit B: Infringement of ’033 Patent

22 Exhibit C: Infringement of ’966 Patent

23 Exhibit D: Infringement of ’885 Patent

24 Sonos has not yet been provided with full discovery of Google’s products, including non-
25 public documentation sufficiently describing the Accused Instrumentalities, sufficient written
26 discovery responses from Google, and testimony from Google’s witnesses. Thus, Sonos
27 expressly reserves its right to amend and/or supplement these assertions or to asserted additional
28